

Partial Listing



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United States Patent [19]
Sloane

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[54] **METHOD AND APPARATUS FOR
PROMOTING PRODUCTS AND
INFLUENCING CONSUMER PURCHASING
DECISIONS AT THE POINT-OF-PURCHASE**

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[57] **ABSTRACT**

[21] **Appl. No.:** **08/655,478**

A system and method for influencing and potentially altering a consumer's purchase decisions at the point-of-purchase in a retail store using a portable bar code scanner that is in constant wireless communication with the store and a retailer/manufacture's computer/controller. The consumer uses the portable bar code scanner to scan products in the store, and if a scanned product is currently under a promotion, the controller alerts the consumer's portable bar code scanner as to the promotion, so that the consumer can take advantage of the promotion. In another embodiment, the consumer will be identified before beginning shopping by their frequent shopper card, so that the computer/controller, in communication with the portable bar code scanner, can utilize the consumer's past purchase history and offer the consumer promotional product discounts. A video surveillance camera within the portable bar code scanner also allows the retailer to monitor each portable bar code scanner's use throughout the retail establishment for security purposes.

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G06F 19/00

[52] **U.S. Cl.** **705/16; 705/1; 705/14;**
705/18; 705/20; 705/23

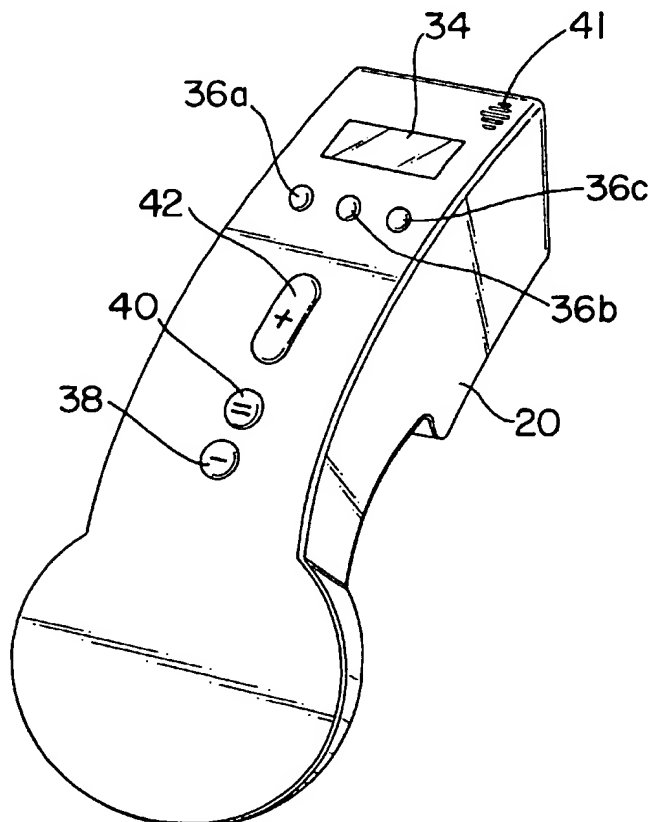
[58] **Field of Search** **705/14, 16, 17,**
705/18, 20, 21, 23, 24

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24 Claims, 6 Drawing Sheets



DOCUMENT-IDENTIFIER: US 5918211 A

TITLE: Method and apparatus for promoting products and influencing consumer purchasing decisions at the point-of-purchase

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BSPR:

When the consumer enters a retail establishment, they use an identification to obtain a **portable scanner** from the central scanner station. The consumer swipes or scans their card in a slot provided in the scanner station. Upon identification of the consumer, the portable bar code scanner station unlocks one of the scanners and indicates to the consumer which scanner to take from the rack.

BSPR:

As the consumer is shopping through the store and browsing products, the consumer can scan the **UPC** bar codes (or scan a shelf label having the product **UPC** bar code) for the products they are interested in purchasing and place them in their shopping cart. As the consumer scans the product bar code, either on the product or the shelf, the portable bar code scanner will identify the product and price, will maintain a running total for purchases, and will alert the consumer when a scanned product is currently being offered with some kind of promotion (e.g., buy 2 and receive 50.cent. off). The consumer will then be given the option to accept or reject the product and/or promotion. The **portable scanner** will also alert the consumer of a product promotion for a competitive product or a related product to the consumer scanned product. The consumer will then have the option to reject the scanned product and then find the promoted competitive or related product. These promotion messages sent to the consumer as a result of scanning a product can possibly influence and alter the consumer's purchase decisions at the point-of-purchase.

BSPR:

The portable bar code scanner, in conjunction with the retailer computer/controller automatically provides the consumer with the discounts, credits, rewards and promotions available for their current purchases, and reflects the same on the printed receipt. In addition, a running total of the purchases, the savings per shopping experience, and year-to-date savings will be shown on the **portable scanner**, and will also be recorded and printed on the consumer receipt.

DEPR:

FIG. 2a shows an example of a portable bar code scanner according to the invention. Portable bar code scanners are widely known and used throughout the

world. An example of a **portable personal scanner** used in retail establishments

is the LAST 3803 produced by Symbol Technologies, Inc., Bohemia, N.Y.

Examples

of other **portable scanners** are shown by U.S. Pat. Nos. 5,107,100,

5,149,950,

5,229,590, and 5,315,097 which are hereby incorporated by reference.

DEPR:

Portable bar code scanner 20 has a display 34 for showing messages to the consumer, a plus button 42, a minus button 38 and an equal button 40. When a consumer scans a product, display 34 will show the product's price, in addition to showing any promotional information available for that product or a related product. After scanning the product, the consumer can then decide to add this product to his or her current product total by pressing the plus button 42. If the consumer decides not to accept the product, he can put it back and scan another item. If the consumer accepts the product and then decides he doesn't want to purchase it, they can scan it again and then press the minus button 38 to remove it from his purchase list. Plus and minus buttons 42 and 38, respectively, can also be used by the consumer to accept or reject a product which is the subject of a promotion message observed by the consumer on the display of the **portable scanner** 20. The consumer can use the equal button 40 at any time to see their current running balance on products purchased.

DEPR:

Portable bar code scanner 20 includes indicator lights 36a-36c for indicating to the consumer the occurrence of certain events, such as, for example, ready to scan, a discount being offered, a product promotion, or any other message or event that the retailer/manufacturer feels is necessary to alert the consumer. During operation, portable bar code scanner 20 will scan a product **UPC** bar code, or a shelf label having the product **UPC** code as it is passed by the scanning face 35. FIG. 2b shows an alternative embodiment of scanner 20 with a trigger switch 46 added on the underside. Trigger switch 46 could be incorporated into scanner 20 such that said scanner would only scan a product when said trigger is depressed. A speaker 41 is provided within scanner 20 for providing an audible alert signal or audible message, to the consumer when desired.

DEPR:

FIG. 4 shows the second step of the method according to the invention. A

consumer 14 uses a portable bar code scanner device 20 to scan a shelf label or product 18 having a **UPC** code. The **portable scanner** 20 can be releasably mounted on the consumers shopping cart such that the consumer can use the scanner and keep both hands free (FIG. 12).

DEPR:

FIGS. 8a-8c show examples of additional messages that could be sent to consumer

13 using the portable bar code scanner 20 (FIG. 7) by the computer/controller 12. In the first example, consumer 13, using portable bar code scanner 20, scans the shelf label or product 18 with the **UPC** code. Portable bar code scanner 20 sends the product information to computer/controller 12.

Computer/controller 12 then sends a message 50 to portable bar code scanner 20

for consumer 13 to see. Message 50, in this instance, can tell consumer 13 that a competitive product, or other products in the same product category as scanned label or product 18, are being offered at a discount, or with another consumer promotion. Consumer 13 then finds the promoted product 19 being offered, scans it's shelf label or the product itself with scanner 20, and the scanner then displays the discount. Consumer 13 can then decide to accept or reject the product using the portable bar code scanner 20.

DEPR:

FIG. 10 shows the consumer 13 using his portable bar code scanner 20 to scan the bar code 32 on his frequent shopper card 30 (or as accomplished when the consumer obtains the **portable scanner** 20 from the scanner center 2) before the

consumer starts shopping. The retailer's computer/controller 12 (FIG. 12) accesses the consumer's purchase history, and based on instructions from the computer/controller sends a message to portable bar code scanner 20 offering the consumer discounts, promotions or other information based upon his past purchasing history. In addition, the consumer will also receive messages indicating the current status of their electronic frequent shopper account, and any discounts, credits or awards and promotions that may be available. Thus, the consumer will know of any electronic credits or discounts prior to starting their shopping, so as to possibly influence their present shopping behavior.

CLPR:

1. An apparatus for promoting consumer products having **UPC** bar codes at the point-of-purchase within a retail establishment, comprising:

CLPR:

6. The apparatus according to claim 1, wherein said at least one portable bar code scanner includes indicating means in communication with said processing

means for providing visual product description and price information to the consumer, said indicating means alerting the consumer with consumer product promotional information based on the scanned UPC bar code information received.

CLPR:

16. A method of promoting products having UPC bar codes at the point-of-purchase within retail establishments comprising the steps of:

CLPV:

at least one portable bar code scanner for use by a consumer during shopping, and having scanning means for scanning the UPC bar code, a transmitter for transmitting the scanned UPC bar code information to said processing means, a receiver for receiving consumer product and promotional information transmitted from said data transmission means, and user controls for allowing the consumer to control the portable bar code scanner functions;

CLPV:

said processing means selectively transmitting consumer product and promotional information to said portable bar code scanner based upon the consumer scanned UPC bar code. receiver and the retailer/manufacturer's computer via a local area network.

CLPV:

a second receiver for receiving the scanned UPC bar code from said at least one portable bar code scanner.

CLPV:

a video surveillance camera mounted in said portable bar code scanner for generating a video signal of a scanned UPC bar code and its surrounding area when the scanning faced is passed by the UPC bar code;

CLPV:

scanning a product's UPC bar code with the portable scanner;

CLPV:

sending the scanned product UPC bar code information to the controller;

CLPV:

sending product description, price and promotional information to the bar code scanner based on the scanned UPC code and promotional consumer product information stored in the controller; and,

CCOR:
705/16

CCXR:
705/1

CCXR:
705/14

CCXR:
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CCXR:
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CCXR:
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